

Amendment to the Drawings:

The attached sheets of drawings – both "Replacement" and "Annotated" sheets – represent Figures 3, 4, 7, 17, 19, 20, and 22 amended as required in the Office Action.

Figures 3, 19, and 22 are amended to separately identify Fig. 3A, Fig. 3B, Fig. 19A, Fig. 19B, Fig. 22A, and Fig. 22B.

Figures 4, 7, 17, and 20 are amended to identify every sequence in the figures with the corresponding SEQ ID NO:, as found in the "Sequence Listing."

Attorney Docket No. P66506US0
Appln. No. 09/787,443

Replacement Sheets of Proposed Drawings Corrections

ATTACHMENT

WO 00/18801

Application Number 09/787,443

Amendment

September 15, 2003

PCT/DK99/00500

Replacement Sheet
3/25

Stimulation of neurite outgrowth by the C3-peptide.

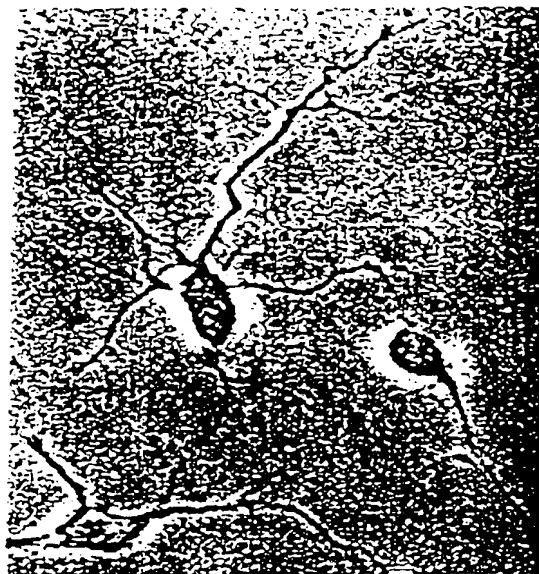


Fig. 3B

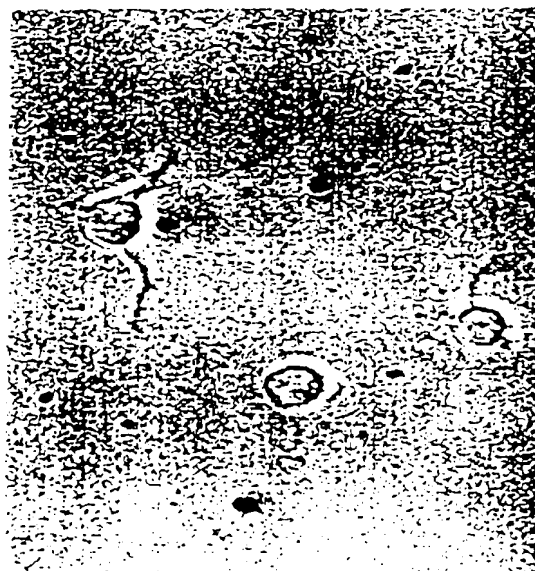


Fig. 3A

SUBSTITUTE SHEET (RULE 26)

Annotated Marked-up Sheet
3/25



Stimulation of neurite outgrowth by the C3-peptide.

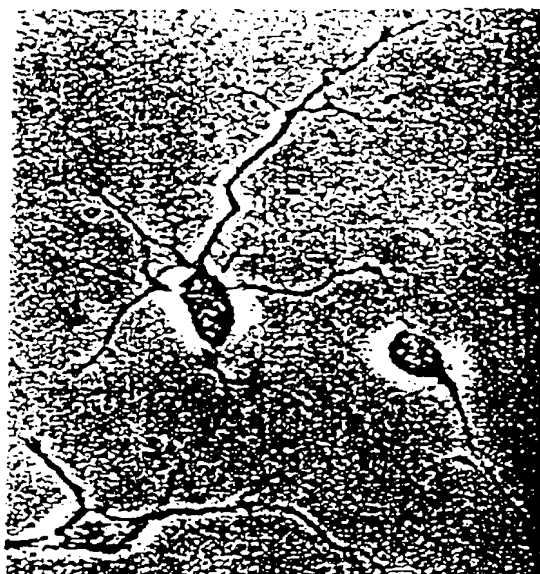


Fig. 3B
Added

Fig. 3B

~~FIG. 3~~

Fig. 3
Deleted

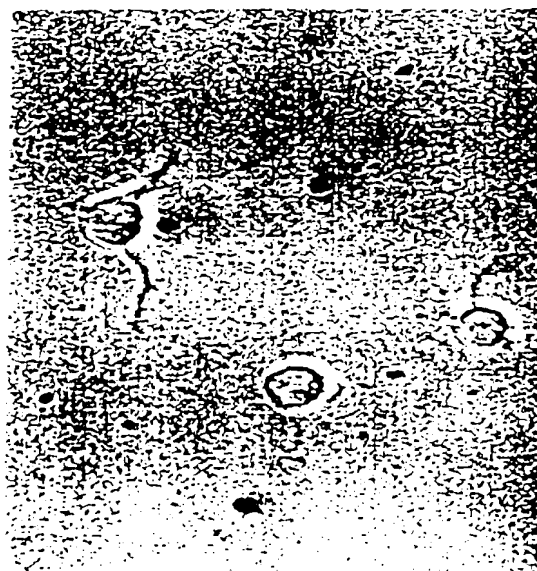


Fig. 3A
Added

Fig. 3A

Application Number 09/787,443

Amendment

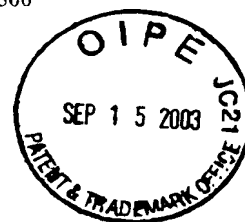
September 15, 2003

WO 00/18801

Replacement Sheet

PCT/DK99/00500

4/25



NCAM-Ig1 binding sequences identified from a combinatorial library of synthetic peptides.

<p>A</p> <pre> A R A L N W G A K P K A G S A V K L K K K A A K Y V L I P I R I S A S F K R S M Q G I - A R R A I L M Q H - A L A Y Y L I V R V N R I A T N K K T G R R P R A K R N G P L I N R I A K R S V Q K L D G Q A R Q K T M K P R R S A G D Y N P D L D R - A S K K P K R N I K A A R K T R E R K S K D A S Q A K R R K G P R A P K L D R M L T K K A K K E K P N K P N D A Q M G R Q S I D R N A E G G K K K K M R A A K K E R Q R K D T Q A K K K E Q K Q R N A A K S R K G N S S I M A R K S R D M T A I K </pre>	<p>SEQ ID NO.:</p> <p>3 4 5 6 7 8 9 10 11 12 13 1 14 15 16 17 18 19 2 20 21 22</p>
<p>B</p> <pre> C3 A S K K P K R N I K A A K R N G P L I N R I A K R S V Q K L D G Q A S T K R S M Q G I - A T N K K T G R R P R A R A L N W G A K P K A R Q K T M K P R R S </pre>	<p>39 40 41 42 43 44</p>
<p>C</p> <pre> D3 A K K E R Q R K D T Q A K K E K P N K P N D A R K T K S R E R K D </pre>	<p>2 45 46</p>
<p>D</p> <pre> D4 A R A L N W G A K P K A T N K K T G R R P R </pre>	<p>3 47</p>

FIG. 4



NCAM-Ig1 binding sequences identified from a combinatorial library of synthetic peptides.

A	SEQ ID NO.:
A R A L N W G A K P K	3
A G S A V K L K K K A	4
A K Y V L I P I R I S	5
A S F K R S M Q G I -	6
A R R A I L M Q G I -	7
A Y Y L I V R V N R I	8
A T N K K T G R R P R	9
A K R N G P L I N R I	10
A K R S V Q K L D G Q	11
A R Q K T M K P R R S	12
A G D Y N P D L D R -	13
A S K K P K R N I K A	14
A R K T R E R K S K D	15
A S Q A K R R K G P R	16
A P K L D R M L T K K	17
A K K E K P N K P N D	18
A Q M G R Q S I D R N	19
A E G G K K K K M R A	20
A K K E R Q R K D T Q	21
A K K K E Q K Q R N A	22
A K S R K G N S S L M	
A R K S R D M T A I K	
B	SEQ ID NO.:
C3 A S K K P K R N I K A	39
A K R N G P L I N R I	40
A K R S V Q K L D G I	41
A S T K R S M Q G I -	42
A T N K K T G R R P R	43
A R A L N W G A K P K	44
A R Q K T M K P R R S	
C	SEQ ID NO.:
D3 A K K E R Q R K D T Q	2
A K K E K P N K P N D	45
A R K T K S R E R K D	46
D	SEQ ID NO.:
D4 A R A L N W G A K P K	3
A T N K K T G R R P R	47

FIG. 4

Column identifying
a SEQ ID NO. for
each sequence
Added.

September 15, 2003

Replacement Sheet

7/25

WO 00/18801

PCT/DK99/00500



Effect of NCAM-Ig1 binding peptides on cell aggregation and neurite outgrowth.

Controls for NCAM Ig1 binding peptide (C3)

NO.	Peptide	Sequence										Effect*	
		S	K	K	P	K	R	N	I	K	A	Neur	agg
1	C3	A			P	K	R	N	I	K	A	++	-
2	C3-acetyl, K (120)	S	K#	K#	P	K#	R	N	I	K#	A	+	-
3	Ala subet K/R	S	K	K	P	K	A	N	I	K	A	++	-
4	116	S	K	K	P	K	A	N	I	K	A	0	0
5	117	S	K	K	P	K	A	N	I	K	A	0	0
6	118	S	K	K	P	K	A	N	I	K	A	0	0
7	119	S	K	K	P	K	A	N	I	K	A	0	0
8	I->A	S	K	K	A	K	R	N	I	K	A	++	-
9	Scrambled C3	K	K	K	K	K	R	S	A	N	P	++	-
10	121	N	A	S	I	R	K	K	K	K	A	++	-
11	114	N	S	P	K	A	R	I	K	A	K	++	-
12	C3-ec	K	S	K	R	Q	R	K	D	T	Q	++	-
13	D3	A	K	K	R	K	R	K	E	R	K	++	-
14	Scrambled D3	R	K	Q	D	K	A	Q	K	P	K	++	-
15	D4	A	A	L	N	W	O	A	K	A	A	++	-
16	Scrambled D4	G	K	R	W	A	P	N	K	A	A	+	-
17	Poly-K	K	K	K	K	K	K	K	K	K	K	+	-
18	K6 (dendrimer, 115)	K	K	K	K	K	K	K	K	K	K	+	-

* effect on neurite extension (neur) and aggregation (agg)
acetylation on lysine

FIG. 7

1. - SEQ ID NO.: 1
2. - SEQ ID NO.: 27
3. - SEQ ID NO.: 28
4. - SEQ ID NO.: 29
5. - SEQ ID NO.: 30
6. - SEQ ID NO.: 31
7. - SEQ ID NO.: 32
8. - SEQ ID NO.: 33
9. - SEQ ID NO.: 34
10. - SEQ ID NO.: 35
11. - SEQ ID NO.: 2
12. - SEQ ID NO.: 36
13. - SEQ ID NO.: 3
14. - SEQ ID NO.: 37
15. - SEQ ID NO.: 38

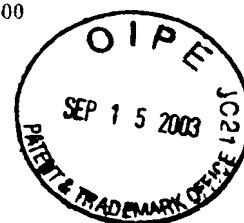
September 15, 2003

WO 00/18801

Annotated Marked-up Sheet

7/25

PCT/DK99/00500



Effect of NCAM-Ig1 binding peptides on cell aggregation and neurite outgrowth.

Controls for NCAM Ig1 binding peptide (C3)

NO.	Peptide	Sequence										Effect*		
		S	K	K#	P	K	R	N	I	K	A	Neur	agg	
1	C3	A	S	K	K#	P	K	R	N	I	K	A	++	+
2	C-macetyl. K (120)	A	S	K#	K#	P	K#	R	N	I	K#	A	+	+
3	Ala subet K/R	A	S	K	K	P	K	A	N	I	K	A	++	+
4	116	A	S	K	K	P	A	A	N	I	K	A	0	0
5	117	A	S	K	K	P	A	A	N	I	K	A	0	0
6	118	A	S	K	K	P	A	A	N	I	K	A	0	0
7	119	A	S	A	A	P	A	A	N	I	K	A	0	0
8	I'->A	A	S	K	K	A	K	R	N	I	K	A	++	+
9	122	A	S	K	K	A	K	R	N	I	K	A	++	+
10	Scrambled C3	A	K	K	K	K	R	I	S	A	N	P	++	+
11	121	A	K	K	K	I	R	K	K	K	K	A	++	+
12	9	P	N	A	S	K	R	R	K	K	A	K	++	+
13	10 C3scr	K	N	S	P	K	A	R	I	K	T	Q	++	+
14	11 D3	A	K	K	E	R	Q	R	K	D	R	K	++	+
15	12 scrambled D3	R	T	K	Q	D	K	A	Q	E	R	K	++	+
16	13 D4	A	R	A	L	N	W	O	A	K	P	K	++	+
17	14 Scrambled D4	G	L	K	R	W	A	P	N	K	A	A	++	+
18	Poly-K	K	K	K	K	K	K	K	N	K	A	A	+	+
19	15 K6 (dendrimer. 115)	K	K	K	K	K	K	K	K	K	K	K	+	+

• effect on neurite extension (neur) and aggregation (agg)
acetylation on lysine

Legend matching
each numbered
sequence in
this table with
the corresponding
SEQ ID NO:
Added

FIG. 7

1. - SEQ ID NO.: 1
2. - SEQ ID NO.: 2
3. - SEQ ID NO.: 3
4. - SEQ ID NO.: 4
5. - SEQ ID NO.: 5
6. - SEQ ID NO.: 6
7. - SEQ ID NO.: 7
8. - SEQ ID NO.: 8
9. - SEQ ID NO.: 9
10. - SEQ ID NO.: 10
11. - SEQ ID NO.: 11
12. - SEQ ID NO.: 12
13. - SEQ ID NO.: 13
14. - SEQ ID NO.: 14
15. - SEQ ID NO.: 15

17/25

The predicted amino acid sequence of human NCAM-140.
(SEQ ID NO: 48)



1 MLQTKDLIWT LFFLGTAIVSL QVDIVPSQGE ISVGESKFFL CQVAGDAKDK DISWFSNPGE
61 KLTPNQQRIS VVWDDSSST LTIYNANIDD AGIYKCVVTG EDGSESEATV NVKIPQKLMF
121 KNAPTPOEFR EGEDAVIVCD WSSLEPTII WRHKGRDVL KDVRFIVLS NNYLQIRGIX
181 KTDEGTYRCE GRILARGEIN PKDIQIVNV PPTIQARQNI VNATANLGQS VTLVCDAGF
241 PEPTMSWTKD GEQIEQEEDD EKVIKPSDDSS QLTIKKVDKN DEAEYICIAE NKAGEQDATI
301 HLKVFAPKI TYVENQTAME LEEQVTLTCE ASGDPIPSIT WRTSTRNISS EEXTLDGDMV
361 VRSHARVSSL TLKSIQYTDG GEYICTASNT IGQDSQSMYL EVQYAPKIQG PVAVYTWEGN
421 QVNITCEVFA YPSATISWFR DGQLLPSSNY SNIKIYNTPS ASYLEVTPDS ENDFGNYNCT
481 AVNRIGQESL EFILVQADTP SSPSIDQVEP YSSTAQVQFD EPEATGGVPI LKYKAENRAV
541 GEEVWHKMY DAKESMEGI VTIVGLKPET TYAVRLAALN GKGLGEISAA SEFKTQPVQG
601 EPSAPKLEGQ MGEDGNSIKV NLIKQDDGGS PIRHYLVYR ALSSEWKPEI RLPSSGDHVM
661 LKSLDWNAYEY EVVVAENQQ GKSKAAHFVF RTSAQPTAIP ANGSPTSGLS TGAIVGILIV
721 IFVILLVVVD ITCYFLNKG LFMCIANLC GKAGPGAKGK DMEEGKAAPS KDESKEPIVE
781 VRTEERTPN HDGGKHTEPN ETTPLEPEK GPVEAKPECO ETETKPAPAE VKTVPNDATQ
841 TKNESKA

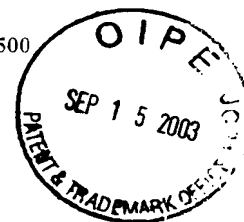
FIG. 17

September 15, 2003

WO 00/18801

Annotated Marked-up Sheet

PCT/DK99/00500



17/25

The predicted amino acid sequence of human NCAM-140.

(SEQ ID NO: 48)

SEQ ID NO:
identifying
the sequence
Added

1 MLQTLQLIWT LFFLGTA VSL QVDIVPSQGE ISVGESKFFL CQVAGDAKDK DISWFS PNGE
61 KLTPNQQRIS VVWDDSSST LTIYNANIDD AGIYKCVVTG EDGSESEATV NVKIPQKLMF
121 KNAPTQOEFR EGEDAVIVCD VVSSLPPTII WRHKGRD VIL KQDVRFIVLS NNYLQIRGIX
181 KTDEGTYRCE GRILARGEIN FKDIQIVTVN PPTIQARQNI VNATANLGQS VTLVCD AEGF
241 PEPTMSWTQD GEQIEQEEDD EKYIPSDDES QLTIGKVDKN DEAEYICIAE NKAGEQDATI
301 HLKVFAPKPI TYVENQTAME LEEQVTLTCE ASGOPIPSIT WRTSTRNISS EEXTLDGDMV
361 VRSHARVSSL TLKSIQYTD A GEYICTASNT IGQDSQSMYL EVQYAPKIQG PVAVYTWEGN
421 QVNITCEVFA YPSATISWFR DGQLLPSSNY SNIKIYNTPS ASYLEVTPDS ENDFGNYNCT
481 AVNRIGQESL EFILVQADTP SSPSIDQVEP YSSTAQVQFD EPEATGGVPI LKYKAENRAV
541 GEEVWHSKWY DAKESMEGI VTIVGLKPET TYAVRLAALN GKGLGEISAA SEFKTQPVQG
601 EPSAPKLEGQ MGEDGNSIKV NLIQDDGGS PIRHYLVRYR ALSSEWKPEI RLPSSGDHVM
661 LKSLDWAAY EVYVVAENQQ GKSKAAHFVF RTSBOPTAIP ANGSP TSGLS TGAIVGILLIV
721 IFVILLVVVD ITCYFLNKGK LFMCI AVNLC GKAGPGAKGK DMEEGKAAPS KDESKEPIVE
781 VRTEERTPN HDGGKHTEPN ETTPLTEPEK GPVEAKPECO ETETKPAPAE VKTVPNDATQ
841 TKENESKA

FIG. 17

Replacement Sheet
19/25

The effect of the NCAM Ig2 domain and the Ig2-p peptide and control peptides derived from the Ig2-p peptide on cell aggregation.

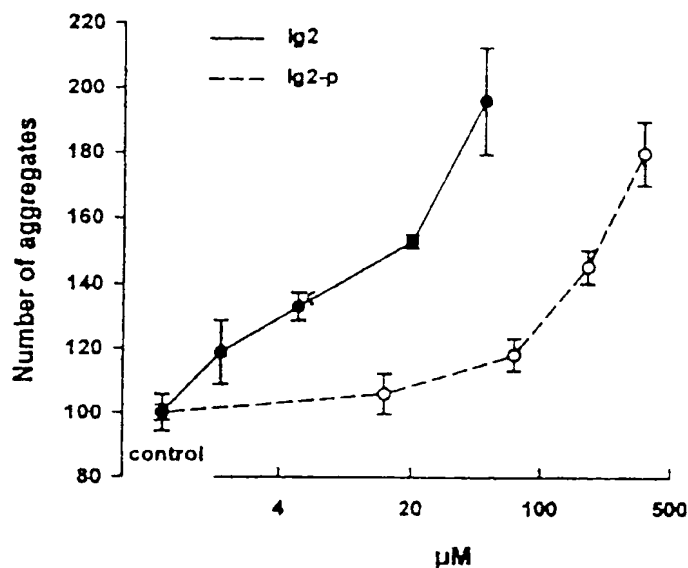


Fig. 19A

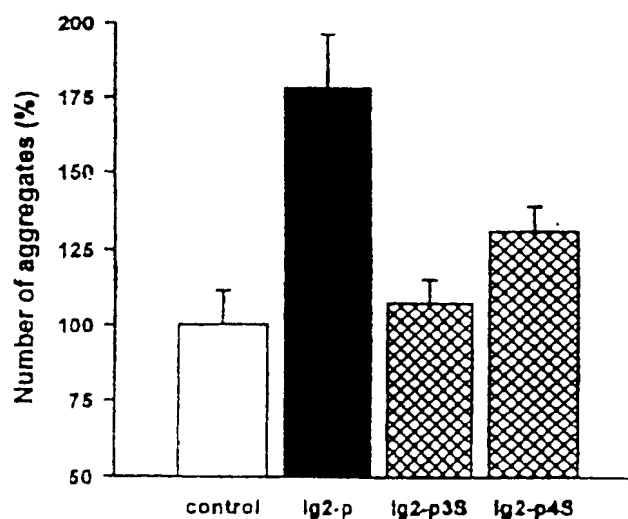


Fig. 19B

Annotated Marked-up Sheet
19/25

The effect of the NCAM Ig2 domain and the Ig2-p peptide and control peptides derived from the Ig2-p peptide on cell aggregation.

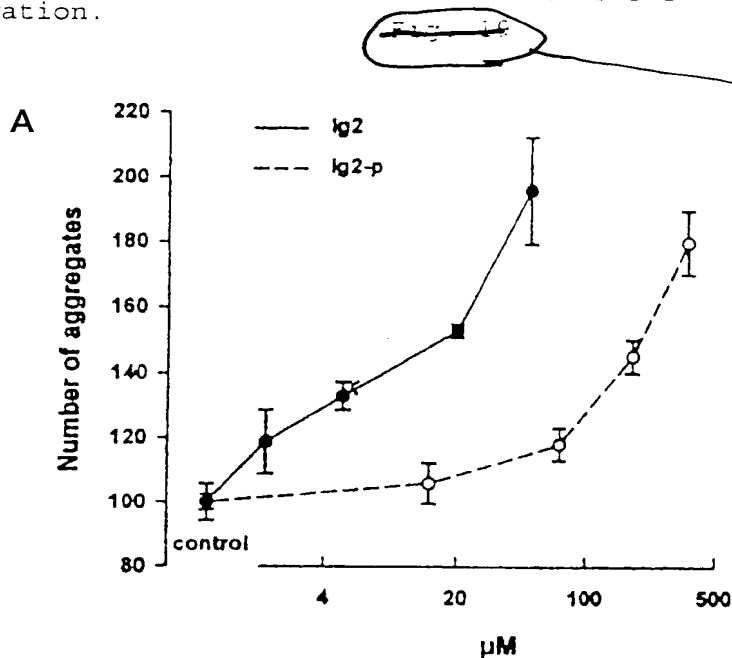


Fig. 19
~~Deleted~~

Fig. 19A

Fig. 19A
Added

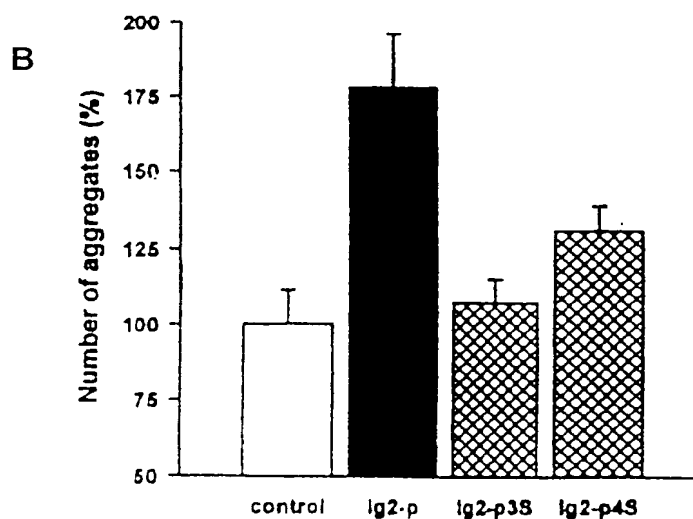


Fig. 19B

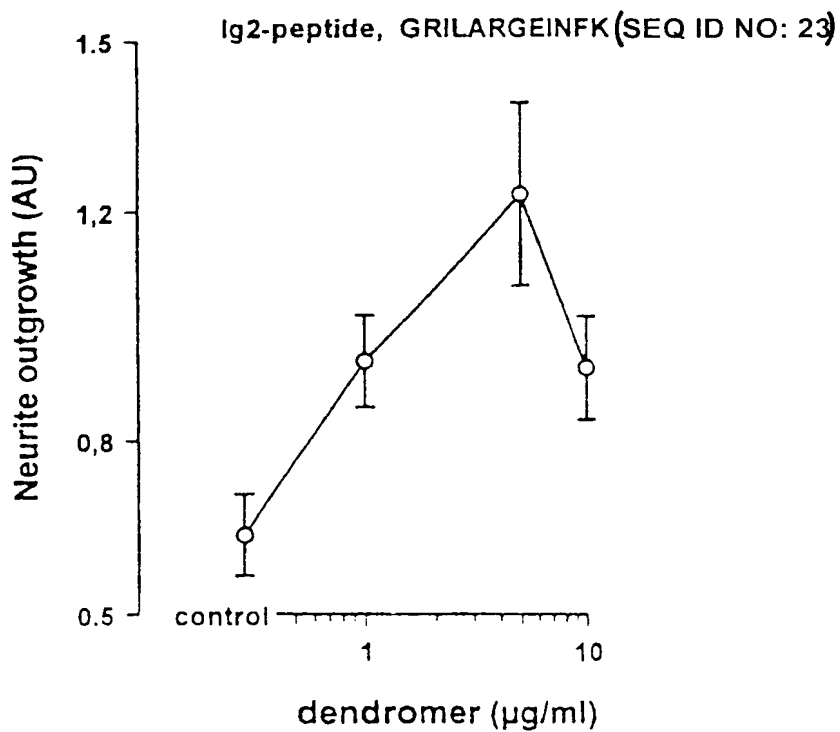
Fig. 19B
Added

20/25



The effect of the Ig2-p peptide dendrimer on neurite outgrowth.

Fig. 20



Application Number 09/787,443
Amendment
September 15, 2003
Annotated Marked-up Sheet

WO 00/18801

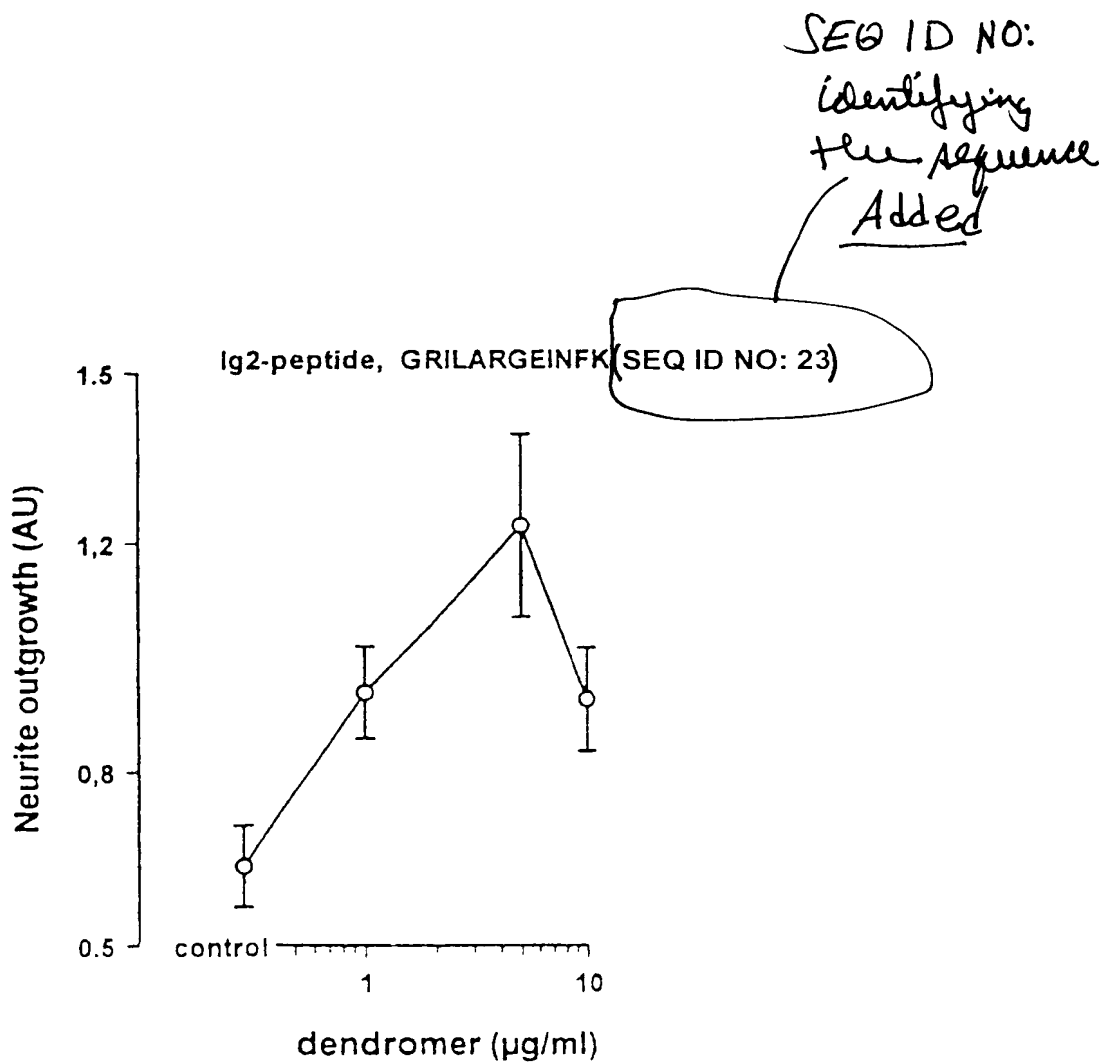
PCT/DK99/00500

20/25



The effect of the Ig2-p peptide dendrimer on neurite outgrowth.

Fig. 20





Micrograph showing the effect of the Ig2-p peptide on neurite outgrowth.



Fig. 22A

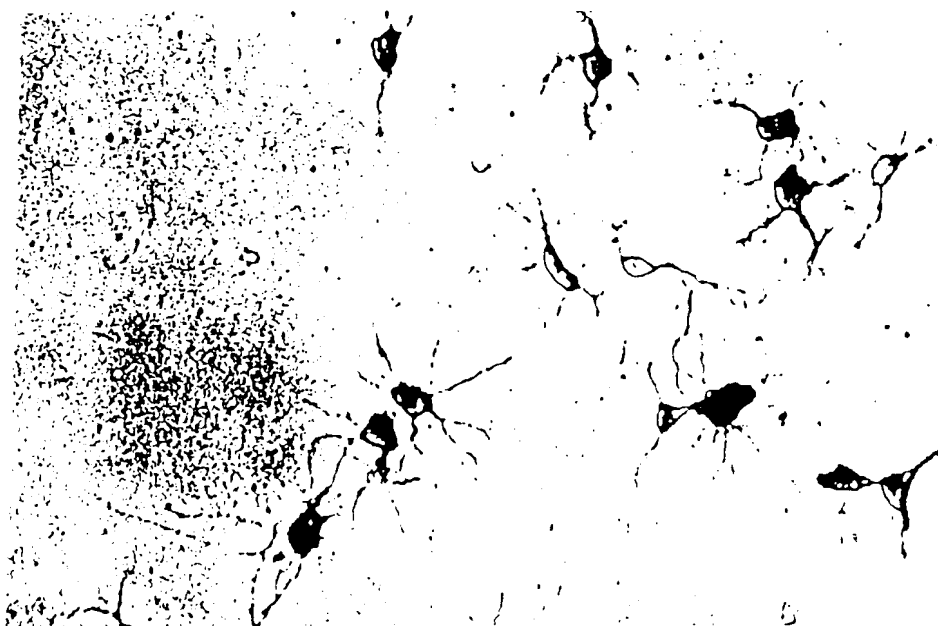
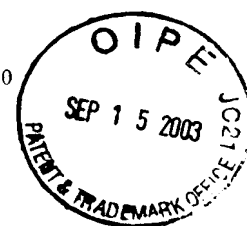


Fig. 22B

Annotated Marked-up Sheet
22/25

Micrograph showing the effect of the Ig2-p peptide on neurite outgrowth.

A



Fig. 22A
Added

Fig. 22A

B

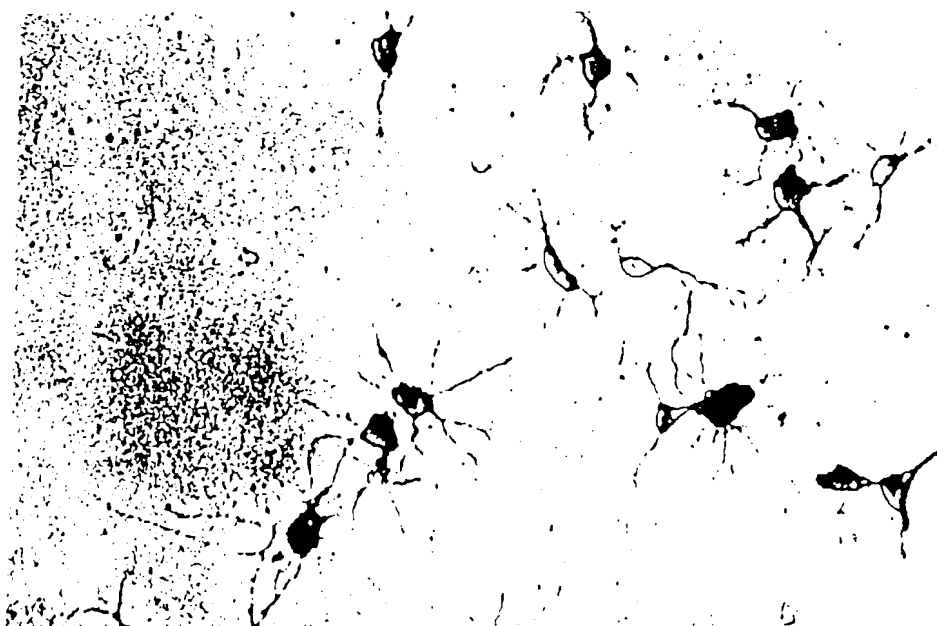


Fig. 22B
Added

Fig. 22B